THE INVENTION THAT IS CLAIMED IS:

1. A method for securely anchoring an ink barrier layer to a substrate in a printhead comprising:

providing a substrate comprising at least one ink ejector thereon;

applying a lower layer comprised of a first metal to said substrate;

applying an upper layer comprised of a second metal to said lower layer;

etching said upper layer in order to remove a plurality of portions thereof while leaving a plurality of other portions of said upper layer intact, said etching of said upper layer also exposing multiple regions of said lower layer;

isotropically etching said multiple regions of said lower layer that were exposed after said etching of said upper layer in order to remove said multiple regions and produce a plurality of upwardly-extending structures positioned on said substrate, said upwardly-extending structures being spaced apart from each other and each comprising an isotropically-etched section of said lower layer and a section of said upper layer thereon;

etching at least one of said upwardly-extending structures on said substrate in order to remove said section of said upper layer therefrom and thereby produce an isotropically-etched anchor member; and

covering said upwardly-extending structures, said anchor member, and any exposed portions of said substrate therebetween with a layer of at least one ink barrier material, said anchor member securely attaching said layer of ink barrier material to said substrate.

2. The method of claim 1 wherein said first metal used in said lower layer is selected from the group consisting of tantalum, aluminum, rhodium, chromium, titanium, molybdenum, and mixtures thereof.

3. The method of claim 1 wherein said second metal used in said upper layer is selected from the group consisting of gold, aluminum, rhodium, and mixtures

thereof.

4. The method of claim 1 wherein said lower layer comprised of said first metal has a thickness of about 0.3 - 1.0 μm.

5. The method of claim 1 wherein said upper layer comprised of said second metal has a thickness of about 0.2 - 1.3 μm.

6. The method of claim 1 wherein said first metal is different from said second metal.

7. The method of claim 1 further comprising heating said ink barrier material to a temperature sufficient to cause said ink barrier material to flow around said anchor member.

8. The method of claim 7 wherein said temperature sufficient to cause said ink barrier material to flow around said anchor member is about 50 - 500 °C.

9. A method for securely anchoring an ink barrier layer to a substrate in a printhead comprising:

providing a substrate comprising at least one ink ejector thereon;

forming at least one isotropically-etched upwardly-extending metallic anchor member on said substrate; and

covering said anchor member with a layer of at least one ink barrier material, said anchor member securely attaching said layer of ink barrier material to said substrate.

10. The method of claim 9 wherein said anchor member is comprised of a metal selected from the group consisting of tantalum, aluminum, rhodium, chromium, titanium, molybdenum, and mixtures thereof.

11. The method of claim 9 wherein said anchor member has a thickness of about 0.3 - 1.0 μm.

12. A method for securely anchoring an ink barrier layer to a substrate in a printhead comprising:

providing a substrate comprising at least one ink ejector thereon;

applying a lower layer comprised of a first metal selected from the group consisting of tantalum, aluminum, rhodium, chromium, titanium, molybdenum, and mixtures thereof to said substrate, said lower layer having a thickness of about 0.3 - 1.0 μm;

applying an upper layer comprised of a second metal which is different from said first metal to said lower layer, said second metal being selected from the group consisting of gold, aluminum, rhodium, and mixtures thereof, said upper layer having a thickness of about 0.2 - 1.3 μm;

etching said upper layer in order to remove a plurality of portions thereof while leaving a plurality of other portions of said upper layer intact, said etching of said upper layer also exposing multiple regions of said lower layer;

isotropically etching said multiple regions of said lower layer that were exposed after said etching of said upper layer in order to remove said multiple regions and produce a plurality of upwardly-extending structures positioned on said substrate, said upwardly-extending structures being spaced apart from each other and each comprising an isotropically-etched section of said lower layer and a section of said upper layer thereon;

etching at least one of said upwardly-extending structures on said substrate in order to remove said section of said upper layer therefrom and thereby produce an isotropically-etched anchor member; and

applying a layer of at least one ink barrier material to said upwardly-extending structures, said anchor member, and any exposed portions of said substrate therebetween so that said ink barrier material covers said upwardly-extending

structures, said anchor member, and said exposed portions of said substrate, said ink barrier material being heated to a temperature of about 50 - 500 °C in order to cause said ink barrier material to flow around said anchor member.

13. A method for securely anchoring an ink barrier layer to a substrate in a printhead comprising:

providing a substrate comprising at least one ink ejector thereon;

applying at least one layer comprised of metal to said substrate;

forming at least one isotropically-etched upwardly-extending metallic anchor member on said layer; and

covering said anchor member with a layer of at least one ink barrier material, said anchor member securely attaching said ink barrier material to said substrate.

14. A high-durability printhead comprising:

a substrate comprising at least one ink ejector thereon;

at least one isotropically-etched upwardly-extending metallic anchor member positioned on said substrate;

at least one elongate conductive circuit element positioned on said substrate; and

a layer of at least one ink barrier material positioned on and covering said elongate conductive circuit element, said anchor member, and any exposed portions of said substrate therebetween, said anchor member securely attaching said layer of ink barrier material to said substrate.

15. The printhead of claim 14 wherein said anchor member is comprised of a first metal selected from the group consisting of tantalum, aluminum, rhodium, chromium, titanium, molybdenum, and mixtures thereof.

16. The printhead of claim 15 wherein said elongate conductive circuit element is comprised of a second metal which is different from said first metal, said

second metal being selected from the group consisting of gold, aluminum, rhodium, and mixtures thereof.

17. The printhead of claim 15 wherein said elongate conductive circuit element is secured to said substrate using an intermediate portion of material positioned therebetween which is comprised of said first metal.

18. A high-durability printhead comprising:

a substrate comprising at least one ink ejector thereon;

at least one isotropically-etched upwardly-extending metallic anchor member positioned on said substrate, said anchor member being comprised of a first metal selected from the group consisting of tantalum, aluminum, rhodium, chromium, titanium, molybdenum, and mixtures thereof;

at least one elongate conductive circuit element positioned on said substrate, said circuit element being comprised of a second metal selected from the group consisting of gold, aluminum, rhodium, and mixtures thereof, said circuit element being secured to said substrate using an intermediate portion of material positioned therebetween which is comprised of said first metal; and

a layer of at least one ink barrier material positioned on and covering said elongate conductive circuit element, said anchor member, and any exposed portions of said substrate therebetween, said anchor member securely attaching said layer of ink barrier material to said substrate.

19. A high-durability printhead comprising:

a substrate comprising at least one ink ejector thereon;

at least one layer comprised of metal positioned on said substrate;

at least one isotropically-etched upwardly-extending metallic anchor member positioned on said layer; and

a layer of at least one ink barrier material positioned on and covering said anchor member, said anchor member securely attaching said ink barrier material to

said substrate.